

### **REMARKS / ARGUMENTS**

The present application includes pending claims 1-42, all of which have been rejected. Claims 1, 11, 21, and 31 have been amended. The Applicant respectfully submits that the claims define patentable subject matter.

Claims 1-6, 11-16, 21-26, 31-36, and 41-42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over USP 6023733 ("Periasamy"), in view of USPP 2002/0131363 ("Beshai"). Claims 7-10, 17-20, 27-30, and 37-40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Periasamy, in view of Beshai and USP 5521910 ("Matthews"). The Applicant respectfully traverses these rejections at least based on the following remarks.

### **REJECTION UNDER 35 U.S.C. § 103**

In order for a *prima facie* case of obviousness to be established, the Manual of Patent Examining Procedure, Rev. 6, Sep. 2007 ("MPEP") states the following:

The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness."

See the MPEP at § 2142, citing *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), and *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval). Further, MPEP § 2143.01 states that “the mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art” (citing *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007)). Additionally, if a *prima facie* case of obviousness is not established, the Applicant is under no obligation to submit evidence of nonobviousness:

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See MPEP at § 2142.

**I. The Proposed Combination of Periasamy and Beshai Does Not Render Claims 1-6, 11-16, 21-26, 31-36, and 41-42 Unpatentable**

**A. Independent Claims 1, 11, 21, and 31**

With regard to the rejection of independent claim 1 under 103(a), the Applicant submits that the combination of Periasamy and Beshai does not disclose or suggest at least the limitation of “aggregating messages from a physical layer of each communication band and each communication channel associated with each of a plurality of protocols in a single multi-protocol layer of the multi-band, multi-protocol network,” as recited by the Applicant in independent claim 1.

The Office Action states the following:

For claims 1, 11, 21, 31, and 41, Periasamy et al. teach a method, a machine-readable storage (medium) (see 202-206 in Fig. 2A), a system (see Fig. 1) for providing enhanced connectivity (efficient path determination, see title) in a multi-protocol (Data link switching may be implemented on a multi-protocol routers, see col. 4, lines 4-5) network, the method comprising:

aggregating messages of each communication channel (across the communication channel, see col. 1, line 65, and Fig. 2B shows multi ports-channels; data flow path 164-192-190 in Fig. 1, and passing that data ... where the data are sequentially formatted as a frame for delivery onto the channel 180 as bits, see col. 2, lines 21-24. The transmission side is described in this paragraph, and receiving side is symmetrical but in a reverse direction. Note that it is bi-directional communication. The LLC 180 at the source 110 corresponds to the LLC 190 at the destination 150) from a physical layer (see physical 164 in Fig. 1) associated with each of a plurality of protocols (multi-protocol, see col. 4, lines 4-5) in a single multi-protocol layer of the multi-protocol network (see LLC 180 or 190 in Fig. 1. The LLC is a single multi-protocol layer);

See the Office Action at pages 2-3. With regard to Applicant's "aggregating messages", the Examiner, in the above argument, is relying primarily on Periasamy's Fig. 1. The Applicant points out that Periasamy's Fig. 1 illustrates a conventional protocol stack and flow of data from the sending process 104 to the receiving process 174. Periasamy, in Fig. 1 or any of the remaining figures, does not disclose any accumulation (or aggregation) of physical layer messages during the data flow cycle. More specifically, Periasamy's data simply flows through the physical layers 124-164 and then up to the receiving process 174. There is simply no aggregation of physical layer messages either at the source station 110 or the destination station 150. In fact, Periasamy does

not disclose aggregation of any type of messages. Beshai does not overcome this deficiency of Periasamy.

Therefore, the Applicant maintains that the combination of Periasamy and Beshai does not disclose or suggest at least the limitation of "aggregating messages from a physical layer of each communication band and each communication channel associated with each of a plurality of protocols in a single multi-protocol layer of the multi-band, multi-protocol network," as recited by the Applicant in independent claim 1.

Furthermore with regard to the rejection of independent claim 1 under 103(a), the Applicant submits that the combination of Periasamy and Beshai does not disclose or suggest at least the limitation of "identifying an optimal communication path from among said communication band and said communication channel based on said aggregated messages in said single multi-protocol layer," as recited by the Applicant in independent claim 1.

The Office Action states the following:

identifying an optimal communication path (it generally must undertake a "route discovery procedure" to identify the sole or optimal path the message is to travel, see col. 3, lines 28-30) from among said communication channel based on said single multiprotocol layer (specified in the path over the LLC connection to the destination LAN, see col. 3, lines 59-60);

See Office Action at page 3. The Examiner is relying for support on Periasamy's "route discovery procedure," which is described in greater detail in column 3 of the reference.

More specifically, the Applicant points out that Periasamy's "route discovery procedure" includes the transmission of "all-paths explorer" packet, which causes the receiving stations to issue a response frame with the corresponding MAC address and routing information. See Periasamy at col. 3, lines 36-50. Periasamy does not disclose any aggregation of physical layer messages and the subsequent use of the aggregated messages for purposes of determining (or identifying) an optimal communication path. Beshai does not overcome this deficiency of Periasamy.

Therefore, the Applicant maintains that the combination of Periasamy and Beshai does not disclose or suggest at least the limitation of "identifying an optimal communication path from among said communication band and said communication channel based on said aggregated messages in said single multi-protocol layer," as recited by the Applicant in independent claim 1.

Accordingly, the proposed combination of Periasamy and Beshai does not render independent claim 1 unpatentable, and a *prima facie* case of obviousness has not been established. The Applicant submits that claim 1 is allowable. Independent claims 11, 21, and 31 are similar in many respects to the method disclosed in independent claim 1. Therefore, the Applicant submits that independent claims 11, 21, and 31 are also allowable over the references cited in the Office Action at least for the reasons stated above with regard to claim 1.

**B. Independent Claim 41**

With regard to the rejection of independent claim 41 under 103(a), the Applicant submits that the combination of Periasamy and Beshai does not disclose or suggest at least the limitation of "a multi-protocol layer above, and interfacing with, said MAC layer," as recited by the Applicant in independent claim 41. The Examiner relies on the same argument as used above with regard to claim 1 (see pages 2-3 of the Office Action). The Applicant respectfully disagrees with the above argument and points out that neither Periasamy nor Beshai are related to, or disclose or suggest, a multi-protocol network. In fact, neither Periasamy nor Beshai discloses or suggest a multi-protocol layer above the MAC layer. Accordingly, the proposed combination of Periasamy and Beshai does not render independent claim 41 unpatentable, and a *prima facie* case of obviousness has not been established. The Applicant submits that claim 41 is allowable.

**C. Rejection of Dependent Claims 2-6, 12-16, 22-26, 32-36, and 42**

Based on at least the foregoing, the Applicant believes the rejection of independent claims 1, 11, 21, 31, and 41 under 35 U.S.C. § 103(a) as being unpatentable over Periasamy in view of Beshai has been overcome and requests that the rejection be withdrawn. Additionally, claims 2-6, 12-16, 22-26, 32-36, and 42 depend from independent claims 1, 11, 21, 31, and 41, respectively, and are, consequently, also respectfully submitted to be allowable.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 2-6, 12-16, 22-26, 32-36, and 42.

**II. The Proposed Combination of Periasamy, Beshai, and Matthews Does Not Render Claims 7-10, 17-20, 27-30, and 37-40 Unpatentable**

Based on at least the foregoing, the Applicant believes the rejection of independent claims 1, 11, 21, and 31 under 35 U.S.C. § 103(a) as being unpatentable over Periasamy in view of Beshai has been overcome and requests that the rejection be withdrawn. Matthews does not overcome the deficiencies of Periasamy and Beshai. Additionally, claims 7-10, 17-20, 27-30, and 37-40 depend from independent claims 1, 11, 21, and 31, respectively, and are, consequently, also respectfully submitted to be allowable.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 7-10, 17-20, 27-30, and 37-40.

**CONCLUSION**

Based on at least the foregoing, the Applicant believes that all claims 1-42 are in condition for allowance. If the Examiner disagrees, the Applicant respectfully requests a telephone interview, and requests that the Examiner telephone the undersigned Attorney at (312) 775-8176.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

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